

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/080640 A3

(51) International Patent Classification:
C25C 1/12 (2006.01) C25C 7/02 (2006.01)

(21) International Application Number:
PCT/EP2005/001127

(22) International Filing Date: 4 February 2005 (04.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10 2004 008 813.6
20 February 2004 (20.02.2004) DE

(71) Applicant (for all designated States except US): **OUT-OKUMPU TECHNOLOGY OY** [FI/FI]; Riihitontuntie 7, FIN-02200 Espoo (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ANASTASIJEVIC, Nikola** [DE/DE]; Zum Niddersteg 11, 63674 Altenstadt (DE). **NEPPER, Jean-Paul** [DE/DE]; Obere Römerhofstrasse 51, D-61381 Friedrichsdorf (DE). **KOENEKE, Martin** [DE/DE]; Grünerweg 28a, 51375 Leverkusen (DE). **LOHRBERG, Dirk** [DE/DE]; Wilhelm-Leuschner-Strasse 114, 63263 Neu-Isenburg (DE). **MARTTILA, Tom** [DE/DE]; Verkkokuja 7 B, FIN-02230 Espoo (FI). **VIRTANEN, Henri** [FI/FI]; Likkastentie 99, FIN-28610 Pori (FI).

(74) Agent: **KEIL & SCHAAFHAUSEN**; Cronstettenstrasse 66, 60322 Frankfurt am Main (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
22 June 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS AND PLANT FOR ELECTRODEPOSITING COPPER

(57) Abstract: The present invention relates to a process for electrochemically winning or refining copper by electrodepositing copper from an electrolyte solution containing the metal in ionogenic form, in which the electrolyte is passed through an electrolysis plant comprising at least one electrolytic cell, which in an electrolyte tank for receiving the electrolyte has at least two electrodes serving as anode and cathode, which are alternately arranged at a distance from each other, and to a corresponding plant. To increase the economic efficiency of such processes and plants, it is proposed in accordance with the invention to immerse the at least one cathode during operation of the electrolysis into the electrolyte over a length of at least 1.2 meters.



WO 2005/080640 A3